

PROJECT DESCRIPTION

GENERAL

THIS PORTION OF THE PROJECT INVOLVES THE MODIFICATION OF THE EXISTING TRAFFIC CONTROL SIGNAL AND ADDITION OF INTERCONNECT AT THE INTERSECTION OF MD 122 AND WHITEHEAD ROAD IN BALTIMORE COUNTY. MD 122 IS ASSUMED TO RUN IN AN EAST-WEST DIRECTION.

INTERSECTION OPERATION

THE INTERSECTION WILL OPERATE IN A NEMA SIX-PHASE, FULL-TRAFFIC-ACTUATED MODE WITH THE MD 122 APPROACHES OPERATING CONCURRENTLY AND THE WHITEHEAD ROAD/COURT APPROACHES OPERATING CONCURRENTLY.

EXCLUSIVE LEFT-TURN PHASING EXISTS FOR EASTBOUND AND WESTBOUND MD 122 APPROACHES. EXCLUSIVE INDICATIONS WILL FLASH BETWEEN 10:00 P.M. AND 6:00 A.M., SEVEN (7) DAYS A WEEK.

RIGHT-TURN OVERLAP PHASING EXISTS FOR SOUTHBOUND WHITEHEAD ROAD APPROACH.

AN ALTERNATE PEDESTRIAN PHASE EXISTS ACROSS THE EAST LEG OF MD 122.

CONTROLLER REQUIREMENTS

INSTALL A FULL-TRAFFIC-ACTUATED, EIGHT-PHASE CONTROLLER WITH SYSTEM PACKAGE FIVE (5) FOUR-CHANNEL, TIME-DELAY-OUTPUT LOOP DETECTOR AMPLIFIERS, AND ASSOCIATED HARNESSES HOUSED IN A NEMA SIZE "6" BASE MOUNTED CABINET.

MAINTENANCE OF TRAFFIC

THE FOLLOWING TRAFFIC CONTROL STANDARDS SHALL BE REFERENCED FOR THE PROJECT.

STANDARD NO. MD-104.00 - 104.00-30

STANDARD NO. MD-104.03-01 (INTERSECTION FLAGGING OPERATION)

STANDARD NO. MD-104.41-01 (INTERSECTION FAR-RIGHT LANE CLOSURE)

STANDARD NO. MD-104.44-01 (LEFT LANE CLOSURE)

STANDARD NO. MD-104.45-01 (RIGHT LANE CLOSURE)

STANDARD NO. MD-104.46-01 (CENTER LANE CLOSURE)

STANDARD NO. MD-104.48-01 (INTERSECTION TURN BAY LANE CLOSURE)

PROJECT CONTACTS

THE CONTACT PERSONS FOR SHA ARE AS FOLLOWS:

MR. RANDALL SCOTT  
ASSISTANT DISTRICT ENGINEER - TRAFFIC  
PHONE: (410) 321-2781

MS. SUENNETTE POPE  
DISTRICT UTILITIES ENGINEER  
PHONE: (410) 321-2841

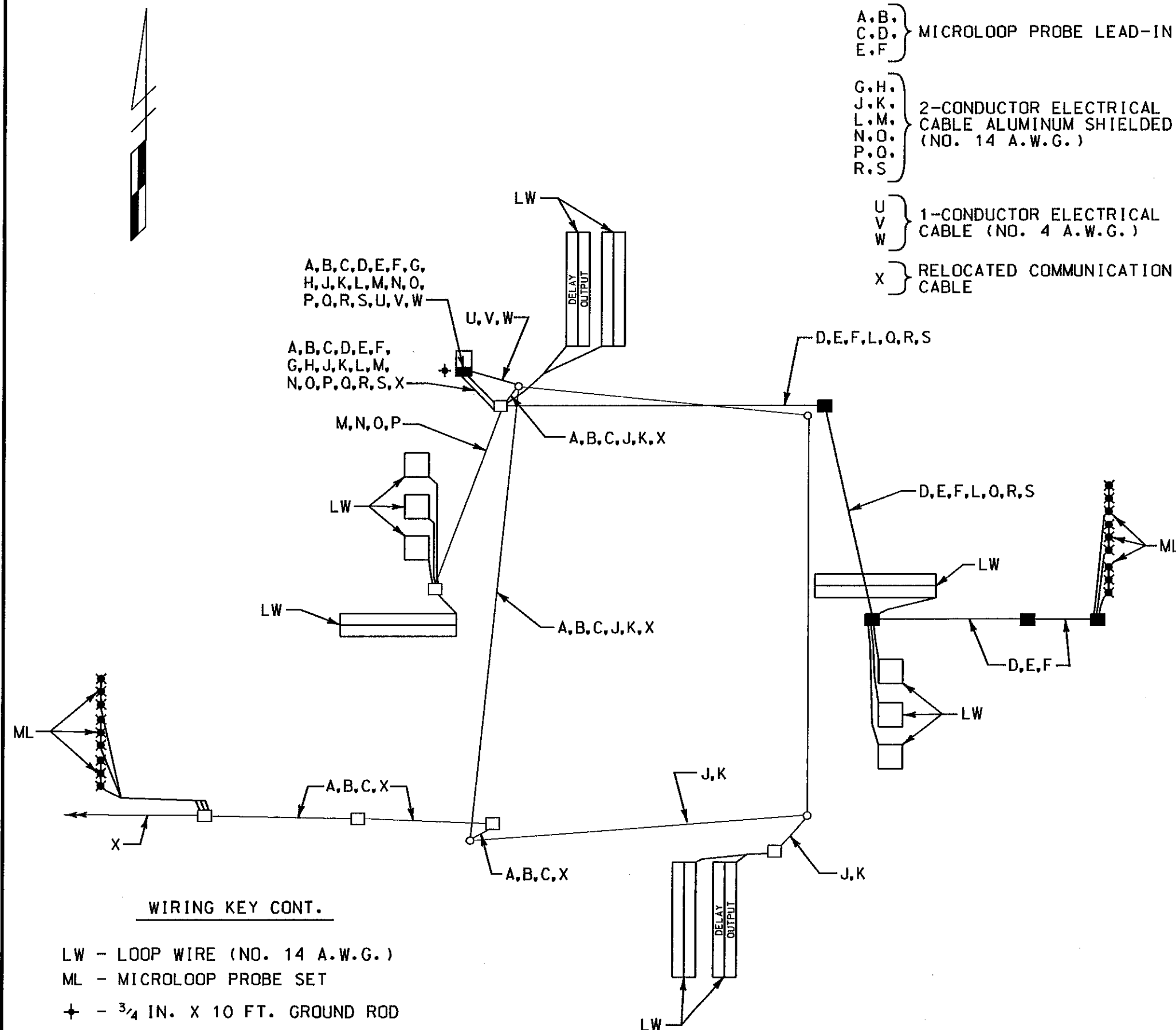
MR. STEVE MARCISZEWSKI  
ASSISTANT DISTRICT ENGINEER - MAINTENANCE  
PHONE: (410) 321-2761

MR. RICHARD L. DAFF, SR.  
CHIEF, TRAFFIC OPERATIONS DIVISION  
PHONE: (410) 787-7630

WIRING DIAGRAM

WIRING KEY

A, B, C, D, E, F } MICROLOOP PROBE LEAD-IN  
G, H, J, K, L, M, N, O, P, Q, R, S, U, V, W } 2-CONDUCTOR ELECTRICAL CABLE ALUMINUM SHIELDED (NO. 14 A.W.G.)  
X } RELOCATED COMMUNICATION CABLE  
U, V, W } 1-CONDUCTOR ELECTRICAL CABLE (NO. 4 A.W.G.)



EQUIPMENT LIST "A"

A. EQUIPMENT TO BE SUPPLIED AND INSTALLED BY THE SHA

ITEM NO.	QUANTITY	DESCRIPTION
9002	5 EACH	FOUR-CHANNEL, TIME-DELAY-OUTPUT, LOOP DETECTOR AMPLIFIER
9087	1 EACH	EIGHT-PHASE, FULL-TRAFFIC-ACTUATED CONTROLLER WITH SYSTEM PACKAGE HOUSED IN A NEMA SIZE "6" BASE MOUNTED CABINET
9089	94 S.F.	SHEET ALUMINUM SIGNS TO CONSIST OF : <ul style="list-style-type: none"><li>- 1 EACH ASSOCIATED SHIELD ASSEMBLY "EAST, MD 122, RIGHT ARROW" (30 IN. X 51 IN.) - POLE MOUNT</li><li>- 1 EACH ASSOCIATED SHIELD ASSEMBLY "WEST, MD 122, LEFT ARROW" (48 IN. X 75 IN.) - POLE MOUNT</li><li>- 1 EACH ASSOCIATED SHIELD ASSEMBLY "EAST, MD 122, LEFT ARROW" (48 IN. X 75 IN.) - POLE MOUNT</li><li>- 1 EACH ASSOCIATED SHIELD ASSEMBLY "WEST, MD 122, RIGHT ARROW" (30 IN. X 51 IN.) - POLE MOUNT</li><li>- 2 EACH D-3(1) SIGN "SECURITY BLVD." (VARIABLE X 16 IN.) DUAL FACED - SPAN MOUNT</li></ul>

EQUIPMENT LIST "C"

C. EQUIPMENT TO BE REMOVED AND RETURNED TO SHA

SHA FORCES SHALL REMOVE THE CONTROLLER AND ALL AUXILIARY EQUIPMENT FROM THE CONTROLLER CABINET. THE CABINET AND ALL OTHER MATERIALS TO BE REMOVED SHALL BECOME PROPERTY OF THE CONTRACTOR.

EQUIPMENT LIST "B"

B. EQUIPMENT TO BE FURNISHED AND/OR INSTALLED BY THE CONTRACTOR

ITEM NO.	QUANTITY	DESCRIPTION
1001	1 EACH	MAINTENANCE OF TRAFFIC
2002	1 C.Y.	TEST PIT EXCAVATION
5001	1 EACH	FURNISH AND INSTALL HEAT APPLIED PERMANENT THERMOPLASTIC PAVEMENT MARKING ARROW
5003	4 EACH	REMOVE EXISTING PAVEMENT MARKING LETTER OR ARROW
5004	95 L.F.	12 IN. WHITE HEAT APPLIED THERMOPLASTIC PAVEMENT MARKINGS
5005	50 L.F.	24 IN. WHITE HEAT APPLIED THERMOPLASTIC PAVEMENT MARKINGS
5008	145 L.F.	REMOVAL OF EXISTING PAVEMENT LINE MARKING - ANY WIDTH
6004	80 S.F.	4 INCH CONCRETE SIDEWALK
8011	14 EACH	FURNISH AND INSTALL 12 INCH VEHICULAR TRAFFIC SIGNAL HEAD SECTION
8022	1 EACH	FURNISH AND INSTALL CONTROL AND DISTRIBUTION EQUIPMENT (120/240 V, 1 PHASE 3 WIRE SYSTEM)
8027	6 EACH	FURNISH AND INSTALL MICROLOOP PROBE SET WITH 1000 FOOT LEAD-IN CABLE
8050	1 EACH	REMOVE AND DISPOSE FOUNDATION 12 IN. BELOW GRADE
8051	1 EACH	REMOVE AND DISPOSE OF EXISTING MATERIAL AND EQUIPMENT AS PER ASSIGNMENT
8054	330 L.F.	FURNISH AND INSTALL 3 IN. SCHEDULE 80 RIGID PVC CONDUIT - TRENCHED
8055	145 L.F.	FURNISH AND INSTALL 4 IN. SCHEDULE 80 RIGID PVC CONDUIT - BORED
8056	30 L.F.	FURNISH AND INSTALL 4 IN. SCHEDULE 80 RIGID PVC CONDUIT - TRENCHED
8063	2 C.Y.	FURNISH AND INSTALL CONCRETE FOR SIGNAL FOUNDATION
8067	80 L.F.	FURNISH AND INSTALL 1 INCH ELECTRICAL CONDUIT - GALVANIZED SLEEVE
8073	80 L.F.	FURNISH AND INSTALL 1 INCH LIQUID TIGHT FLEXIBLE NON-METALLIC CONDUIT FOR DETECTOR WIRE SLEEVE
8074	80 L.F.	FURNISH AND INSTALL ELECTRICAL CABLE - 1 CONDUCTOR NO. 4 A.W.G. - THHN/THWN
8076	4 EACH	FURNISH AND INSTALL ELECTRICAL HANDHOLE
8079	94 S.F.	INSTALL OVERHEAD SIGN
8083	1 EACH	FURNISH AND INSTALL GROUND ROD - 3/4 INCH DIAMETER X 10 FOOT LENGTH
8084	1800 L.F.	FURNISH AND INSTALL ELECTRICAL CABLE - 2 CONDUCTOR (NO. 14 A.W.G.) ALUMINUM SHIELDED
8090	3700 L.F.	FURNISH AND INSTALL LOOP WIRE ENCASED IN FLEXIBLE TUBING (NO. 14 A.W.G.)
8091	1500 L.F.	FURNISH AND INSTALL SAW CUT FOR SIGNAL (LOOP DETECTOR)
8094	20 L.F.	FURNISH AND INSTALL 2 IN. SCHEDULE 80 RIGID PVC CONDUIT - TRENCHED
8096	1 EACH	INSTALL CONTROLLER AND CABINET - BASE MOUNT
NEG.	50 L.F.	DISCONNECT AND RE-FEED ELECTRICAL CABLE

PHASE CHART

	1	2	3	4	5	6	7	8	9	10	11	12	13	14
PHASE 1 + 5	←G→	←G→	R	R	←G→	←G→	R	R	R	R	R	R	DW	DW
1 + 5 CHANGE	PHASE 1 + 5 MAY CHANGE TO PHASE 1 + 6, PHASE 2 + 5 OR PHASE 2 + 6													
PHASE 1 + 6	←G→	←G→	G	G	←R→	←R→	R	R	R	R	R	R	DW	DW
1 + 6 CHANGE	←Y→	←Y→	G	G	←R→	←R→	R	R	R	R	R	R	DW	DW
PHASE 2 + 5	←R→	←R→	R	R	←G→	←G→	G	G	R	R	R	R	DW	DW
2 + 5 CHANGE	←R→	←R→	R	R	←Y→	←Y→	G	G	R	R	R	R	DW	DW
PHASE 2 + 6	←R→	←R→	G	G	←R→	←R→	G	G	R	R	R	R	DW	DW
2 + 6 CHANGE	←R→	←R→	Y	Y	←R→	←R→	Y	Y	R	R	R	R	DW	DW
PHASE 4 + 8	←R→	←R→	R	R	←R→	←R→	R	R	G	G	G	G	DW	DW
4 + 8 CHANGE	←R→	←R→	R	R	←R→	←R→	R	R	Y	Y	Y	Y	DW	DW
PHASE 4 + 8 ALT	←R→	←R→	R	R	←R→	←R→	R	R	G	G	G	G	WK	WK
PED CLEARANCE	←R→	←R→	R	R	←R→	←R→	R	R	G	G	G	G	FL/DW	FL/DW
4 + 8 ALT CHANGE	←R→	←R→	R	R	←R→	←R→	R	R	Y	Y	Y	Y	DW	DW
FLASHING OPERATION	←FL/R→	←FL/R→	FL/Y	FL/Y	←FL/R→	←FL/R→	FL/Y	FL/Y	FL/R	FL/R	FL/R	FL/R	DARK	DARK

TSP-2



MARYLAND DOT - STATE HIGHWAY ADMINISTRATION  
Office of Traffic & Safety  
TRAFFIC ENGINEERING DESIGN DIVISION

GENERAL INFORMATION SHEET

MD 122 (SECURITY BLVD.) AND WHITEHEAD ROAD/ COURT



Whitman, Reardon  
and Associates, LLP

801 South Caroline Street  
Baltimore, Maryland 21231  
(410) 235-3450

DRAWN BY: S. BLOSS  
CHECKED BY: N. LEARY  
SCALE: NONE  
DATE: 6/26/2003

F.A.P. NO.  
S.H.A. NO. XX1085/85  
COUNTY: BALTIMORE  
LOG MILE: 0.30122.00.79

TS. NO.  
3889 C  
T.I.M.S. NO.  
E449

SHEET NO.  
OF